

Abstract

A method of the Virtual Private Network (VPN) communication employed for a security gateway apparatus and the security gateway apparatus using the same, which allow a personal computer outside a local area network (LAN) to
5 access, via a WAN, to a terminal on the LAN, virtually regarding the outside PC as a terminal on the LAN. The communication method is employed for a security gateway apparatus to connect, through concentration and conversion process, between a LAN and a WAN including a public network. Security Architecture for the Internet Protocol (IPsec) establishes VPN with an outside
10 PC having a dialup connection to the WAN. During an Internet Key Exchange (IKE) communication that is performed prior to the IPsec communication, the security gateway apparatus integrates a Dynamic Host Configuration Protocol (DHCP) communication option into an IKE data, and designates the IP address of the outside PC from a tunneled IP packet.